WHAT IS CLAIMED IS:

1. A surface acoustic wave filter comprising:

a first acoustic channel including a first input transducer and a first output transducer, the first acoustic channel being weighted so as to define a first transfer function by the first input transducer and the first output transducer; and

a second acoustic channel including a second input transducer and a second output transducer, the second acoustic channel being weighted so as to define a second transfer function by the second input transducer and the second output transducer; wherein

the first and second input transducers are electrically connected in parallel and the first and second output transducers are electrically connected in parallel;

the first and second transfer functions are substantially in phase within a pass band and have substantially opposite phases outside the pass band; and

the bandwidth of the second acoustic channel is narrower than that of the first acoustic channel, and a first side lobe of the second transfer function of the second acoustic channel has a phase opposite to that of a main lobe of the first transfer function of the first acoustic channel.

2. A surface acoustic wave filter according to Claim 1, wherein the ratio of a 30 dB bandwidth of the first transfer function of the first acoustic channel to a 30 dB bandwidth of a composite transfer function obtained by connecting the first and second acoustic channels in parallel is in the range of about 100% to about 150%.

3. A surface acoustic wave filter according to Claim 1, wherein each of the first and second acoustic channels includes a transversal surface acoustic wave filter device.

4. A surface acoustic wave filter according to Claim 1, wherein each of the first and second acoustic channels includes a unidirectional electrode.

5. A surface acoustic wave filter according to Claim 1, wherein the first and second acoustic channels are provided on a piezoelectric substrate.

6. A surface acoustic wave filter according to Claim 1, wherein the ratio of a 30 dB bandwidth of the first transfer function of the first acoustic channel to a 30 dB bandwidth of a composite transfer function obtained by connecting the first and second acoustic channels in parallel is about 120%.

7. A surface acoustic wave filter according to Claim 1, wherein the first acoustic channel defines a main track, and the second acoustic channel defines a sub-track.

8. A surface acoustic wave filter according to Claim 1, wherein the each of the first input transducer and first output transducer includes an IDT electrode arranged with a distance therebetween in a propagation direction of surface acoustic wave devices.

9. A surface acoustic wave filter according to Claim 1, wherein the each of the second input transducer and second output transducer includes an IDT electrode arranged with a distance therebetween in a propagation direction of surface acoustic wave devices.